



UNITED STATES PATENT AND TRADEMARK OFFICE

K.D.

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/753,058

12/28/2000

Francois G. Moore

064731.0182

9315

7590

09/14/2004

Terry J. Stalford
Baker Botts LLP
2001 Ross Avenue
Dallas, TX 75201

EXAMINER

PHUNKULH, BOB A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,058

Applicant(s)

MOORE ET AL.

Examiner

Bob A. Phunkulh

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-24 is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-16, 20, 21 and 25 is/are rejected.
- 7) ☒ Claim(s) 7-9 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/25/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 10-14, 20-21, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Theodoras, II et al. (US 6,751,743), hereinafter Theodoras.

Regarding claim 1, Theodoras discloses a method for automatic concatenation detection of synchronous optical network (SONET) channels, comprising:

receiving at network element (one of the plurality of nodes, see figure 2 and col. 4 lines 55-67) a SONET frame including mandatory overhead and plurality channels for a bundled connection (see col. 1 lines 48-67; col. Lines 1-23; and col. 5 lines 38-50); automatically determining signal configuration channels within the bundled connection based on the mandatory overhead (see col. 5 lines 38-50); and

automatically provisioning the network element to cross-connect the channels within the bundled connection based on the signal configuration determined from the mandatory overhead (col. 5 lines 38-50).

Regarding claim 2, Theodoras discloses the mandatory overhead comprises line overhead (see col. 5 lines 38-50).

Regarding claim 3, Theodoras discloses, overhead comprises synchronous transport signal (STS) payload pointer including concatenation indicators, further comprising automatically determining signal configuration of the channels the bundled connection based on the concatenation indicators (see col. 2 lines 14-23).

Regarding claim 4, Theodoras discloses the channels comprise synchronous transport signal-level (STS-I) channels (see col. 1 lines 48-67).

Regarding claim 6, Theodoras inherently disclose extracting the mandatory overhead from SONET frame (see col. 1 line 48 to col. 2 line 23);

forwarding the mandatory overhead management complex to a management complex in the network element;

determining the management complex a signal configuration of the channels the bundled connection based on the mandatory overhead extracted from SONET frame; and provisioning switch in the network element cross-connect the channels the bundled connection based the signal configuration determined from the mandatory overhead (see figure 3 and col. 5 lines 14-50).

Regarding claim 10, Theodoras discloses the signal configuration comprises a plurality of connections in the bundled connection (see col. 1 lines 48 to col. 2 line 23).

Regarding claim 11, Theodoras discloses the system for automatic concatenation detection of the synchronous optical network (SONET) channels, comprising:

logic encoded in media; and

the logic operable upon execution receive at network element SONET frame including a mandatory overhead and plurality of channels for bundled connection, automatically determine signal configuration of the channels the bundled connection based on the mandatory overhead and automatically provision network element to cross-connect the channels the bundled connection based on the signal configuration determined from mandatory overhead (see col. 1 lines 48-67; col. Lines 1-23; and col. 5 lines 38-50).

Regarding claim 12, Theodoras discloses the mandatory overhead comprises line overhead (see col. 5 lines 38-50).

Regarding claim 13, Theodoras discloses, overhead comprises synchronous transport signal (STS) payload pointer including concatenation indicators, further comprising automatically determining signal configuration of the channels the bundled connection based on the concatenation indicators (see col. 2 lines 14-23).

Regarding claim 14, Theodoras discloses the channels comprise synchronous transport signal-level (STS-I) channels (see col. 1 lines 48-67).

Regarding claim 16, Theodoras inherently disclose extracting the mandatory overhead from SONET frame (see col. 1 line 48 to col. 2 line 23);

forwarding the mandatory overhead management complex to a management complex in the network element;

determining the management complex a signal configuration of the channels the bundled connection based on the mandatory overhead extracted from SONET frame; and provisioning switch in the network element cross-connect the channels the bundled connection based the signal configuration determined from the mandatory overhead (see figure 3 and col. 5 lines 14-50).

Regarding claim 20, Theodoras discloses the signal configuration comprises a plurality of connections in the bundled connection (see col. 1 lines 48 to col. 2 line 23).

Regarding claim 21, Theodoras discloses a communications network, comprising:

a plurality of synchronous optical network (SONET) elements interconnected by fiber optic links (the network 200 having a plurality of nodes connected by the optical links, see figure 2 and col. 4 lines 55-67); and

each of the SONET elements operable to automatically provision cross-connections for a group of associated channels based on line overhead information transmitted in the channels (see figure 3, and col. 5 lines 38-50).

Regarding claim 25, Theodoras discloses a method for automatic concatenation of synchronous optical network (SONET) channels, comprising:

receiving at a network element (intermediate nodes 32, see figure 1) a SONET frame including a group of consecutive SONET synchronous transport signal (STS) channels assigned to a customer and an overhead of the SONET frame, the overhead including a line overhead having an STS payload pointer with concatenation indicators;

automatically determining at the network element a signal configuration of the SONET STS channels for the customer based on the concatenation indicators (col. 1 line 48 to col. 2 line 23); and

automatically provisioning a switch of the network element to cross-connect the SONET STS channels of the customers based on the signal configuration determined from the concatenation indicators (see figure 3 and col. 5 lines 38-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theodoras.

Regarding claims 5, and 15, Theodoras discloses the network element includes a switch with cross-connections (switching matrix 330, see figure 3). Theodoras fails to disclose the network element a switching table.

However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to includes a switching table in the network node of Thodoras for switching table is widely used and available for mapping of input-output connections in a communication node for cross-connect switching or packet switching.

Allowable Subject Matter

Claims 7-9, 17-19, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 22-24 are allowed.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2661

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

Hand-delivered responses should be brought to:

220 20th Street S.

Crystal Plaza Two, Lobby, Room 1B03

Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(571) 272-3079**. The fax phone number for this group is **(703) 872-9314**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2661

Bob A. Phunkulh

Bob A. Phunkulh

TC 2600

Art Unit 2661

September 3, 2004

BOB PHUNKULH
PRIMARY EXAMINER